OCT 23 1928

The Classical Weekly

Published on Monday, October 1 to May 31, except in weeks in which there is a legal or School holiday (Election Day, Thanksgiving Day, Christmas Day, New Year's Day, Lincoln's Birthday, Washington's Birthday, Easter Sunday, Decoration Day).
Place of Publication, Barnard College, New York City. In United States of America, $2.00 per volume; elsewhere, $2.50.
Address all communications to Charles Knapp, at 1737 Sedgwick Avenue, New York City.
Entered as second-class matter, November 18, 1907, at the Post Office, New York, N. Y., under the Act of Congress of March 3, 1879. Acceptance for mailing at special rate provided for in Section 1103, Act of October 3, 1917, authorized June 28, 1918.

VOL. XXII, NO. 4 MONDAY, OCTOBER 22, 1928 WHOLE NO. 588

Nothing resembling them has ever before been published

PROGRESS TESTS IN LATIN

By

B. L. ULLMAN
Professor of Latin, University of Chicago

A. W. SMALLEY
Hyde Park High School, Chicago

Here is something entirely new—tests in Latin. They are based on the "everlasting fundamentals" of the language and give complete and efficient drill on all phases of the study. They number 73 and cover the following phases of the subject: vocabulary, forms, sentence structure, syntax, pronunciation, comprehension, word study and derivation, and Roman civilization. They are a most dependable means of scoring and recording each pupil's progress.

A prominent educator has said of these tests: "No greater boon has ever been granted to Latin teachers".

These tests can be used with any textbook or in any order desired. They come in tablet form with perforated sheets.

Price $0.84

The Macmillan Company New York Boston Chicago Atlanta Dallas San Francisco

As accurate as experts can make them---

THE HARVARD TESTS IN LATIN

These tests cover the morphology, syntax, and vocabulary of Secondary School Latin. They have been prepared by experts under the direction of the Harvard Graduate School of Education. Care has been taken to make them representative of the best teaching practice.

The tests provide a thoroughly reliable gauge of each pupil's knowledge and of the standard of the class. The different Forms of each test, which are practically equivalent in scope and difficulty, should be given at intervals to determine progress.

The tests are put up in convenient pads of 30 copies. Each pad includes explicit directions for giving and scoring the test, a full description of its purpose, a correction key, and a class record blank.

LATIN MORPHOLOGY. Forms A, B, C, D, and E: each $0.48.

LATIN SYNTAX. Forms A and B: each $0.48.

LATIN VOCABULARY. Forms A, B, C, D, and E: each $0.48.

Boston **GINN AND COMPANY** New York

Chicago Atlanta Dallas Columbus San Francisco

The Classical Weekly

VOLUME XXII, No. 4 MONDAY, OCTOBER 22, 1928 WHOLE No. 588

GREEK AND ROMAN WEATHER LORE OF THE SUN AND THE MOON

Men judge by the complexion of the sky
The state and inclination of the day.

Shakespeare, King Richard the Second 3.2

"There was no information for which Dr. Johnson was less grateful than for that which concerned the weather". I trust that, if classicists hold similar views about the weather in general, they may make an exception of classical weather lore.

In one limited sense it is an anachronism to speak of the popular weather lore of the ancients. In prognosticating they did not make a clear distinction between scientific and popular meteorology. Numerous weather signs that were generally current in Greece and in Italy are recorded in Aristotle's Meteorologica and in Seneca's Naturales Quaestiones. These scientists did, however, present physical explanations of some signs, but I doubt not that their theories were generally known to educated people who made no pretension to any special scientific knowledge[1].

Any explanation on a physical basis, whether correct or not, belongs to scientific meteorology. This is especially true of theories that have to do with celestial conditions and phenomena. Greek and Roman weather lore of the heavens in general has, therefore, a place in the history of meteorology such as will be impossible for contemporary popular weather signs to attain. In THE CLASSICAL WEEKLY 20.43–49, 51–54 I discussed one other aspect of celestial weather lore, the beliefs about the stars and the constellations, under the title, The Classical Astral Weather Chart for Rustics and Seamen[2].

In the eyes of the inhabitants of earth the sun and the moon are the most conspicuous bodies in the heavens. They are not so conspicuous in folklore and religion, although one finds them occupying a more prominent place in the popular imagination the farther back one traces their recorded history. From them a vast body of weather signs has been derived.

I have not the literary artifice to record in brief compass all the different signs, with their minor variations, without giving the article something of the atmosphere of a book of reference. My primary purpose is to make the material available for ready reference.

The translations that I am quoting from the Phaenomena of Aratus are by G. R. Mair; those from the De Signis of Theophrastus are by Sir Arthur Hort. Both ancient and modern works that I refer to frequently are given in the notes by the name of the author only, sometimes in abbreviated form, as indicated below[3].

The sun and the moon were the calendars of antiquity, especially for the peasant. One of the Greek words for moon is *μήνη*, 'measurer', and the word for month is *μήν*, 'the moon-period'[4]. "...That, in the dim prehistoric time, the Roman month accorded with the period of the moon, seems fairly certain. There are clear indications that the day named *Idus* originally marked the time of the full moon, in the middle of the month, while the first day or *Kalendae* indicated the day of the new moon..."[5] Appian[6] makes the statement that it was Julius Caesar who changed the Roman reckoning of the year from the course of the moon to that of the sun.

As Lucretius says[7], these watchful luminaries, sun and moon, in their course through the revolving world taught men that the seasons return and that the universe is controlled by law and order. At the beginning of his work on Agriculture Varro invokes the sun and the moon by whom the seasons for sowing and reaping are measured. In short, "anyone who desires to forecast the weather must pay special heed to the character of the risings and settings of these luminaries[8]". Signs derived from the sun were generally regarded as the more dependable[9].

[1] For a most exhaustive discussion of Greek meteorology see Otto Gilbert, Die Meteorologischen Theorien des Griechischen Altertums (Leipzig, Teubner, 1907. Pp. 746).

[2] I have published in THE CLASSICAL WEEKLY the following studies on still other aspects of classical weather lore: An Animal Weather Bureau, 14.89–93, 97–100; The Folk Calendar of Times and Seasons, 16.3–7; The Plant Almanac and Weather Bureau, 17.105–108; Magic and the Weather in Classical Antiquity, 18. 154–157, 163–166.

[3] Aratus = Aratus, Phaenomena, readily accessible in G. R. Mair's translation, in The Loeb Classical Library; Th. = Theophrastus, De Signis: a translation of this, by Sir Arthur Hort, is likewise to be found in The Loeb Classical Library: Pliny = Plinius, Naturalis Historia; Seneca = Seneca, Naturales Quaestiones; Geop. = Geoponica, in the Teubner series.

For the following modern works, which are cited more or less freely, only the authors' names are given: Fanny D. Bergen, Current Superstitions (Volume 4 of Memoires of the American Folk-Lore Society); H. H. C. Dunwoody, Weather Proverbs (United States of America: War Department, Signal Service Notes, No. 9, Washington, 1883); Edward B. Garriott, Weather Folk-Lore and Local Weather Signs (United States Department of Agriculture, Weather Bureau, Washington, 1903); Richard Inwards, Weather Lore: A Collection of Proverbs, Sayings and Rules Concerning the Weather[3] (Elliot Stock, London, 1898); D. E. Marvin, Curiosities in Proverbs (G. P. Putnam's Sons. New York and London, 1916); C. Swainson, A Handbook of Weather Folk-Lore (Blackwood and Sons, Edinburgh and London, 1873); Daniel L. Thomas and Lucy B. Thomas, Kentucky Superstitions (Princeton University Press, Princeton, 1920). An extensive bibliography is given by Inwards, 207–212.

W. J. Humphreys, Weather Proverbs and Paradoxes (Baltimore, Williams and Wilkins Company, 1923), discusses the scientific aspects of the proverbs that are reliable—"separates the false from the true". T. Morris Longstreth, Reading the Weather (New York, The Macmillan Company, 1923), has much material that is pertinent to this paper.

[4] A scholium on Aratus 733 tells us that the Greeks measured the months by the course of the moon and the Egyptians by that of the sun. For other references to the connection of the sun and the moon with the calendar see, for example, Plutarch, Numa 18.1, Solon 25.3; Diogenes Laertius 1.59. On the moon as measurer see Vergil, Aeneid 3.645: Tertia iam lunae se cornua lumine complent; Apuleius, De Mundo 29; Curtius 8.9.36; Catalogus Codicum Astrologorum Graecorum 1.85–87.

[5] Sir John Edwin Sandys, A Companion to Latin Studies[3], 92.

[6] De Bellis Civilibus 2.154. See also Cassius Dio 43.26.1.

[7] 5.1436–1439. See also Lucan, Pharsalia 10.201: Sol tempora dividit anni; Bede, De Natura Rerum 19: Hic <sol> cursu variante dies et menses, tempora dividit et annos; Pliny 2.12: <sol> temporum...rector. [8] Th. 6.

[9] Aratus 820, whom Vergil follows, Georgics 1.439. Plutarch, Quaestiones De Arati Signis 1 (Teubner edition, 7, page 102), discusses the reasons for the greater confidence in lunar signs.

THE SUN

SOLSTICES AND EQUINOXES

The solstice was the *magnus anni cardo*[10], the hinge on which the year turned. Its two occurrences were the main divisions of the year, but hardly less important were the periods when days and nights were equal[11]. For those of us who spend most of our days indoors these four periods pass unnoticed except for a casual comment or two, but they were important events in antiquity. Many agricultural operations were scheduled for these seasons; others were performed before them or after them[12]. From the medical point of view the solstices and the equinoxes were dangerous seasons.[13]

At Methymna, the astronomer Matriketas observed the solstices from Mount Lepetymnos[14]. Another astronomer, Meton, set up pillars and recorded the turnings of the sun[15]. Tradition pretended to know the place on the earth above which the sun reversed its course. 'There is an island called Syria, if you have ever heard of it, above Ortygia, where occur the turnings of the sun'[16].

The ancients believed in the existence of 'solstice rains' (*solstitiales imbres*)[17]. Vergil[18] urges farmers to pray for wet summer solstices and clear winters: Umida solstitia atque hiemes orate serenas, agricolae.

The equinoctial or 'line' storms are not things of comparatively recent invention. Students of Latin will recall how Caesar hastened his departure from Britain because the equinox was at hand and he did not think that weakened ships should be exposed to the storms of this period[19]. He speaks as if the belief in equinoctial storms was to be taken for granted, as indeed it was[20]. People were reluctant to travel by sea during these periods[21].

Winds, too, had associations with the solstices and the equinoxes. A representative passage is to be found in Aristotle's Meteorologica[22]: "Thus Caecias and in general the winds north of the summer solstice blow about the time of the spring equinox, but after the autumn equinox Lips; and Zephyrus about the summer solstice, but about the winter solstice Eurus"[23]. When Caesar was keenly desirous of setting out from Brundisium against Pompey, the winds held him back, for it was at the time of the winter solstice[24]. It was a sign of rain if Lips blew at the equinox[25].

"Again, if after the spring equinox mists come down, it is an indication of breezes and winds by the seventh month, reckoning inclusively"[26]. "The fifteenth day after the winter solstice is generally marked by southerly winds. "If there is a northerly wind, everything dries up, if a southerly, there is abundant moisture"[27].

Long range forecasts from solstice to equinox and from equinox to solstice are recorded by Theophrastus (7):

> . . . whatever is the condition of the atmosphere when the Pleiad sets, that it continues in general to be till the winter solstice, and, if it does change, the change only takes place after the solstice: while, if it does not change, it continues the same till the spring equinox: the same principle holds good from that time to the rising of the Pleiad, from that again to the summer solstice, from that again to the autumnal equinox, and from that to the setting of the Pleiad.

A modern popular weather seer professed to be able to "predict weather for six months according to the point from which the wind blew at the equinoxes"[28].

The points in the zodiac at which the sun turned in both summer and winter and the signs it entered at the equinoxes were matters of general interest[29]. We read that there was a subtle influence in certain signs of the zodiac which had some relation to the rains and the storms that occurred at the autumnal equinox and the winter solstice[30]. Lydus, De Ostentis 42, gives a number of weather conditions which he ascribes to the presence of the moon in certain signs at or near the summer solstice. If, for instance, the moon is in Leo as the solstice comes, one may expect thunder and stormy weather.

Scientific weather students proclaim with much ado that the crossing of an imaginary line by the sun in spring and fall does not upset meteorological conditions, and that statistics show that there is not a maximum of storm frequency at either equinox, but rural grandfathers and many other persons are not less obdurate in their belief in the reality of equinoctial storms than would be the ghosts of ancient Romans. It is pertinent to mention in this connection that many outdoor functions have storm associations. Annually I hear that the local county fair always has to contend with rain. A similar tradition is just as fixed for 'Freshman Week' at this University. The reader will recall similar traditions.

The daytime, too, is subdivided into periods, and changes in the weather generally occur at sunrise, mid-morning, noon, mid-afternoon and sunset[31]. For my purposes, however, it seems best to make other captions in studying the relation of the sun to the weather.

SIGNS DERIVED FROM THE RAYS OF THE SUN

When there are rays shooting out before the actual rising of the sun, they are a sign of rain and also of wind[32]. "The more those beams are borne in shadow,

[10]Pliny 18.264. [11]See Th. 6–7; Pliny 18.220–222.
[12]For examples see Pliny 13.127; 15.59; 17.127, 130; 18.232, 265, 315; *et passim*. Other interesting references are in Plutarch, Moralia 274 C, and in Varro, Res Rusticae 1.35.2.
[13]Hippocrates, 'On Airs, Waters and Places', 11. See also Bede's lengthy discussion, De Aequinoctiis et Solstitiis, in De Temporum Ratione, Chapter 30.
[14]Th. 4. [15]Aelian, Vera Historia 10.7.
[16]Odyssey 15.403–404.
[17]Macrobius, Saturnalia 5.20.15. Compare Pliny 17.14: per solstitia imbres; 2.108; 18.221.
[18]Georgics 1.100–101. Macrobius, Saturnalia 5.20.14, says that the sense of these two verses is as follows: Cum ea sit anni temperies ut hiems serena sit, solstitium vero imbricum, fructus optime proveniunt. [19]Caesar, B. G. 4.36.2. See also 5.23.5.
[20]Pliny 2.108, 18.221; Columella 2.4.11, 11.2.31, 11.2.66, 11.2.94; Appian, Romanae Historiae 7.6.
[21]Catullus 46.2–3; Cicero, Ad Atticum 10.17.3, 12.28.3; Livy 31.47.1, 37.9.5; Tacitus, Historiae 5.23, Annales 1.70; Vegetius 4.39.
[22]2.6, 364 b. See also Pliny 2.119–120, 18.337–338; Seneca, 5.16.3, 5; Aulus Gellius 2.22.7; Apuleius, De Mundo 13; Vegetius 4.38.
[23]E. W. Webster's translation. [24]Appian, De Bellis Civilibus 2.54. [25]Th. 20. Compare 35.
[26]Th. 56. [27]Th. 30.
[28]Journal of American Folk-Lore, 36.16.
[29]See, for example, Aratus 499–517. [30]Pliny 2.108.
[31]Th. 9. [32]Aratus 869–871; Th. 11; Pliny 18.346; Geop. 1.3.2.

the surer sign they give of rain, but if but faint the dusk that veils his beams, like a soft mist of vapour, that veil of dusk portends wind"[33]. "But if the rays of the rising or setting sun converge and crowd on one spot[34] . . . those days will run in company with rushing rain"[35]. Rainy weather is portended when at either the rising or the setting sun the rays appear massed[36]. When the sun as it rises sends its rays far out among the clouds and its disk presents a hollow appearance[37], it signifies rain[38]. "If at dawn its rays are parted, some pointing to the north and some to the south, while the orb itself is clearly seen between, it is a sign of rain and wind"[39]. This piece of weather lore was used by Lucan, Pharsalia 5.540–543:

> Multa quidem prohibent nocturno credere ponto,
> nam sol non rutilas deduxit in aequora nubes
> concordesque tulit radios: Noton altera Phoebi,
> altera pars Borean diducta luce vocabat.

The rays of the rising sun colored as in an eclipse mean rain[40]. If at sunset it rains or if the sun's rays draw a cloud to themselves, there will be a terrible storm the following day[41]. According to our own lore, "When you see the sun drawing water at night, know that it will rain on the morrow. The sun is said to be drawing water when its rays can be seen shining through rifts in distant clouds"[42].

BRIGHTNESS AND COLOR OF THE SUN AND SKY

"May not his orb, whenever thou desirest a fair day, be variegated when first his arrows strike the earth, and may he wear no mark at all but shine stainless altogether"[43]. A pale sun in the morning means a hail storm[44]. It is a sign of clear weather if in winter the sun has a pale color at the time of setting[45], or if it becomes red at that time[46].

When the sun is black[47] or has black spots[48] upon it, there will be rain; when it is reddened[49] or has red spots[50] upon it, there will be wind; when it is colored both black and red, then there will be rain accompanied by wind[51]; but if it rises red and becomes black, it indicates rains[52]. The ancients were interested in the equal or unequal luminosity of the sun[53], but do not seem to have known sun spots in our sense of the term. The influence of these phenomena is not thoroughly understood, but they have been associated with thunderstorms[54], heat waves, flood, and earthquakes[55].

If in winter that part of the sky into which the sun goes down is clear, it is a sign of fair weather, unless on the preceding days that part has not been clear, though it was clear above the horizon: in that case the prospect is uncertain. It is also a sign of fair weather, if during stormy conditions that part of the sky into which the sun sets is clear[56].

The maxim about the clear weather portended by a clear sky at sunset is not to be restricted to winter, however. As Aratus puts it, "If again thus all pure he be in the hour when the oxen are loosed, and set cloudless in the evening with gentle beam, he will still be at the coming dawn attended with fair weather"[57]. Vergil's phrasing is as follows (Georgics 1.458–460):

> At si, cum referetque diem condetque relatum,
> lucidus orbis erit, frustra terrebere nimbis,
> et claro silvas cernes Aquilone moveri.

Shakespeare[58] too has elaborated the idea: "The weary sun hath made a golden set, And, by the bright track of his fiery car, Gives token of a goodly day tomorrow".

An unmistakable sign of rain is the reddish appearance of the sky before sunrise. This usually indicates rain within three days, if not on the same day[59]. A red sky at sunset likewise indicates rain within three days, if not before, but a red sky at dawn is more certain[60].

The belief in the redness of the sky as a sign of rain seems to belong to almost all ages and to all climes. Christ says in Matthew 16.2: "When it is evening, ye say, It will be fair weather, for the sky is red. And in the morning, It will be foul weather today, for the sky is red and lowering. Ye can discern the face of the sky"[61]. Shakespeare, Venus and Adonis 453–456, records the same piece of lore:

> Like a red morn, that ever yet betoken'd
> Wreck to the seaman, tempest to the field,
> Sorrow to shepheards, woe unto the birds,
> Gusts and foul flaws to herdmen and to herds[62].

---

[33]Aratus 872–876. See also Pliny 18.344: Cum oriente radii non inlustres eminebunt, quamvis circumdatae nubes non sint, pluviam portendent.

[34]E. Poste, The Skies and Weather-Forecasts of Aratus, 40 (London, Macmillan and Co., 1880), translates as follows: "A cone of rays converging towards a point". See also Poste's rather lengthy note on this line.

[35]Aratus 840–844; Pliny 18.342. In Geop. 1.2.4 it is stated that this sign means clear weather when clouds are crowded about the sun.

[36]Th. 13; Pliny 18.343. [37]On the hollow disk see note 104.

[38]Pliny 18.346. [39]Th. 26. See also Aratus 829–831; Pliny 18.343; Vergil, Georgics 1.445; Varro in Isidorus, De Natura Rerum 38.4; Bede, De Natura Rerum 36.

[40]Th. 13. See also Aratus 862–865. [41]Pliny 18.343.

[42]Clifton Johnson, What They Say in New England: A Book of Signs, Sayings, and Superstitions, 17 (Boston, Lee and Shepard, 1896).

[43]Aratus 822–825. See also Th. 50; Pliny 18.342; Vegetius 4.41; Geop. 1.2.2; Bede, De Natura Rerum 36.

[44]Pliny 18.342. See also Bede, De Natura Rerum 36.

[45]Th. 50. [46]Si sol rubeat in occasu, sincerus fere dies erit: Isidorus, De Natura Rerum 38.5.

[47]Aratus 834–836.

[48]Th. 11, 27; Vegetius 4.41; Claudian, De Bello Gildonico 1.494: Ora licet maculis adsperserit occiduus sol; Bede, De Natura Rerum 36.

[49]Aratus 834–837; Vegetius 4.41. [50]Th. 27. [51]Aratus 838–839.

[52]Geop. 1.3.2. [53]See, for example, Cassius Dio 45.17.5, 47.40.2.

[54]A caption in The Literary Digest for October 24, 1914 (49.787) reads: "Sun-Spots and Thunder-Storms". Lydus, De Ostentis 46, does tell us, however, that the ancients regarded the sun as the cause of thunderbolts.

[55]A clipping from the Philadelphia Public Ledger of July 22, 1926. In a clipping from the same paper, dated June 1, 1925, a local weather seer makes the following prediction: "The summer will be of five months' duration, not ending until November. The intense heat will be due to spots on the sun".

The Detroit Free Press of October 17, 1926, quotes a British scientist as seeing some connection between sun spots and the Aurora Borealis.

[56]Th. 50. Compare Aratus 850–851.

[57]Aratus 825–827. Compare Pliny 18.342; Isidorus, De Natura Rerum 38.5; Geop. 1.2.3. In Aristotle, Problemata 26.8, the question is asked, 'Why do clear sunsets betoken clear weather and troubled ones stormy?' Compare Shakespeare, Richard the Second 2.4, "Thy sun sets weeping in the lonely west, Witnessing storms to come, woe and unrest".

[58]Richard the Third 5.3.

[59]Th. 10; Aratus 866–868.

[60]Th. 10. Bede, De Natura Rerum 36, is not in entire agreement: Coelum si vespere rubet, serenum diem, si mane, tempestuosum significat.

[61]Compare Isidorus, De Natura Rerum 38.5: Item Dominus in evangelio, Si mane rutilat triste caelum, tempestas futura erit.

[62]Compare the following rime, as listed by Inwards, 62:

> Sky red in the morning
> Is a sailor's sure warning;
> Sky red at night
> Is a sailor's delight.

A version in Scott, The Pirate, Chapter 12, is as follows: "What have we got here? A cloudy night and a red morning! That betokens rough weather". The belief assumes proverbial forms. "A red sun has water in his eye"[63]; "Abendrot Schönwetterbot, Morgen rot fällt in Kot"[64-65].

The following is part of a description[66] of a remarkable dawn of January 13, 1924, which attracted attention on both sides of the English Channel:

The English and French coasts were bathed in lurid crimson amid the hanging folds of fire. The eastern sky was filled with fiery cirrus clouds, shaped like the tentacles of some angry monster, and peering above a low bank of threatening black clouds. Such a crimson dawn foretells rain and blustering wind, often culminating in a fierce tempest. A high dawn, accompanied by red cirrus clouds and a lowering sky, portends tempestuous weather.

The red sky in the morning is one of the comparatively few dependable popular weather signs. A scientific critic informs us that "a red morning sky implies that the whole atmosphere, up to considerable elevations, is humid, and rain, therefore, probable, later in the day"[67].

A lengthy list of "the most important and reliable forecasts" derived from the appearance of the sun at sunrise and at sunset is given by E. B. Dunn, The Weather and Practical Methods of Forecasting It (267-269)[68].

MIST AND THE SUN

Be on your guard for rain when a thin mist arises before the sun and makes its rays faint[69]; likewise when the sun rises out of clouds[70]. If a cloud appears a little before sunrise, the weather will be clear[71]. "... when a broad belt of mist seems to melt and widen before the rising Sun and anon narrows to less, fair will be his course, and fair too, if in the season of winter his hue wax wan at eventide"[72]. Aristotle[73] explains that "Mist is what is left over when a cloud condenses into water, and is therefore rather a sign of fine weather than of rain; for mist might be called a barren cloud".

CLOUDS AND THE SUN

The rising sun predicts winds when the clouds become red before it rises; but when black clouds are mingled with the red, it predicts rain too[74]. Clouds massing together before sunrise mean a fierce storm to come; when they are driven from the east and disappearing to the south, they mean clear weather. The less light that is left by clouds enclosing the sun, the fiercer will the storm be; but if there shall be a double circle around it, fiercer still; and again, if this happens at the rising or setting sun and if the clouds become red, there will come the fiercest storm of all. When clouds do not surround it, but rest upon it, they indicate wind from the quarter from which they came; when they have come from the south, they signify rain too[75].

"If the sun in winter after gleaming out is again obscured, and this is repeated two or three times, it will be stormy all day"[76]. It is a sign of stormy weather when an obstructing cloud below the sun breaks up its rays as it sinks[77]. The next day will be stormy in proportion to the area of the sun obstructed[78]. Rain will generally come within three days if in winter or spring the sun sets in a cloud[79].

When clouds that are massed are scattered by Aquilo as the sun approaches them, they portend winds; if they are scattered by Auster, they portend rains. Clouds girding the heavens on either side of the setting sun signify tempest. Heavy clouds from the east are a more serious threat of rain for the following night, from the west, for the following day[80].

"But if without a cloud he <the sun> dip in the western ocean, and as he is sinking, or still when he is gone, the clouds stand near him blushing red[81], neither on the morrow nor in the night needst thou be fearful of rain"[82]. After a rain bronze-colored clouds near sunset generally herald fine weather for the next day[83]. The scattering of red clouds at sunset means dry weather[84]. If the sun sinks pales into dark clouds, Aquilo will blow[85].

HALOS AND THE SUN

The ring or circle around the sun or moon was called by the Greeks ἄλως, 'threshing floor', by the Romans, *corona*, 'crown'[86].

"A dark halo round the sun indicates rain, especially if it occurs in the afternoon"[87]. If the rising sun is surrounded by a halo, wind may be looked for from the section in which the halo breaks, but, if the entire halo dissolves evenly, clear weather is indicated[88]. If at sunset there is a white circle, it means a mild storm during the night; if a mist, a fiercer storm; if the sun is bright, wind; but if the circle is dark, there will be a strong wind from the direction in which the circle breaks[89]. When halos are nearer to the sun than usual and are uniformly dark, they betoken fiercer storms; if there are two rings, they herald tempests fiercer still[90].

---

[63]Inwards, 55. [64]Deutsche Rundschau 198.46.
[65]For many other proverbs about the redness of the sky see Marvin, 205; Inwards, 61-62; Swainson, 177-182.
[66]The Illustrated London News, January 26, 1924 (164.135). A drawing of the sunrise, by Scriven Bolton, an astronomer-artist, is reproduced on this page.
[67]Humphreys, 31.
[68]Second edition (New York, Dodd, Mead and Company. No date is given, but the book was published *circa* 1917).
[69]Aratus 845-847. [70]Th. 11; Aratus 842-843. [71]Geop. 1.2.2.
[72]Aratus 847-850. [73]Meteorologica 1.9, 346 b (E. W. Webster's translation). [74]Pliny 18.342.
[75]Pliny 18.344-345.
[76]Th. 46. Compare Th. 22, where a more general statement is made. See also Theophrastus, Historia Plantarum 8.10.3.
[77]Th. 11; Aratus 851-857. Pliny, 18.346, says there will be rain if there is a cloud around the sun; Geop., 1.3.2, says this will occur if there is a black cloud near by at the left.
[78]Th. 38.
[79]Th. 11. Compare Pliny 18.225: Ita nubilo occasu pluviosam hiemem denuntiat; Aratus 842-843.
[80]Pliny 18.355.
[81]Compare Scott, The Pirate, Chapter 8: "The sibyl meantime . . let in the fitful radiance of the sun, now lying almost level upon a great mass of red clouds, which, boding future tempest, occupied the edge of the horizon, and seemed to brood over the billows of the boundless seas".
[82]Aratus 858-861; Geop. 1.2.4. [83]Th. 51.
[84]Geop. 1.2.5. Compare 1.2.2.
[85]Isidorus, De Natura Rerum 38.5; Bede, De Natura Rerum 36.
[86]For the difference between 'halo' and 'corona' in English see Humphreys, 36-37, and Longstreth, 140-141.
[87]Th. 22. [88]Pliny 18.345. [89]Pliny 18.346.
[90]Aratus 877-879. See also Pliny 18.344.

Aristotle, Meteorologica 3.3, 372 b, gives the scientific explanation of the weather significance of the halo:

Hence in itself it is a sign of rain, but if it fades away, of fine weather, if it is broken up, of wind. For if it does not fade away and is not broken up but is allowed to attain its normal state, it is naturally a sign of rain since it shows that a process of condensation is proceeding which must, when it is carried to an end, result in rain. For the same reason these haloes are the darkest. It is a sign of wind when it is broken up because its breaking up is due to wind which exists there but has not reached us. This view finds support in the fact that the wind blows from the quarter in which the main division appears in the halo. Its fading away is a sign of fine weather because if the air is not yet in a state to get better of the heat it contains and proceed to condense into water, this shows that the moist vapour has not yet separated from the dry and firelike exhalation: and this is the cause of fine weather[91].

In his Naturales Quaestiones 1.2, Seneca, after repeating many of these weather signs derived from halos and adding to them, gives scientific explanations much in the manner of Aristotle[92].

With regard to the dependability of halos as weather signs, Humphreys writes as follows (38):

Halos are very commonly seen in that high veil of cirrus clouds that so frequently is caught up from the tops of storms and carried far ahead by the swiftly moving currents that nearly always prevail at great altitudes. It is this usual forward position of halos relative to moving storms that makes them the fairly good indicators they are of approaching bad weather. As the proverb puts it,

"The moon with a circle brings water in her beak".

And, as the Zuñi Indians say,

"When the sun is in his house it will rain soon"[93].

SUN DOGS

A picturesque appearance in the sky is the reflection of the sun called by the Greeks παρήλιον, by the Romans *imago solis*, by us *parhelion*, *sun dog*, *sun's hound*, and *mock-sun*[94]. No matter in what part of the heavens it appeared, to the Greeks it signified rain or wind[95]. Aratus[96] is very explicit: "Mark as the Sun is rising or setting, whether the clouds, called parhelia, blush (on South or North or both), nor make the observation in careless mood. For when on both sides at once these clouds gird the Sun, low down upon the horizon, there is no lingering of the storm that comes from Zeus. But if only one shine purple to the North, from the North will it bring the blast; if in the South, from the South; or down pour the pattering rain-drops". According to Theophrastus (22), "If two mock-suns appear, one to the south, the other to the north, and there is at the same time a halo, these indicate that it will shortly rain".

There are many passages both in Greek and in Latin authors calling attention to the appearance of two, three, or even more parhelia at the same time[97]. "They have scarcely ever appeared when the sun was on the meridian, though this once happened in Bosporous where two mock suns rose with the sun and followed it all through the day till sunset"[98].

Ancient scientific explanations of the nature of parhelia are to be found in Aristotle, Meteorologica 3.3, 372 b, Seneca, 1.11, and Psellus, De Omnifaria Doctrina 109 (Migne, Patrologia Graeca 122, col. 752)[99].

In our own lore sun dogs are said to be a sign of coming rain. At Scilly Cove, Newfoundland, "Sun's 'hounds'. . . before the sun denote dirty weather; after the sun, denote fine weather"[100]. The New York Times for December 24, 1925, notes that three were seen the day before in Boston[101]. Compare Shakespeare, III Henry the Sixth 2.1: "Three glorious suns, each one a perfect sun; Not separated with the racking clouds, But sever'd in a pale clear-shining sky".

WINDS AND THE SUN

In addition to the weather lore of the winds introduced sporadically in other parts of this paper the following miscellaneous items may be listed:

Winds get up at sunrise or moonrise. If the rising sun or moon have caused the wind to cease, presently it gets up again with more force, and winds which begin to blow in the day-time last longer and are stronger than those which begin at night[102].

Again, if it <the sun> sets or rises with a burning heat, and there is no wind, it is a sign of wind or rain[103].

If the sun rises with a burning heat but does not shine brilliantly, it is a sign of wind. If the sun has a hollow appearance[104], it is a sign of wind or rain. If it blazes with a burning heat for several days, it portends long-continued drought or wind[105].

If the sky is overcast in whatever quarter the sun is first seen, there will be wind from that quarter[106].

There was a general belief that winds died down at sunset[107]. In this connection it is worth while to recall Vergil, Aeneid 3.568: Interea fessos ventus cum sole reliquit. In commenting on this line Servius says that a change of wind must occur at either the rising or the setting sun.

ASTROLOGY AND THE SUN

Aristotle[108], after stating that both the rising and the setting of Orion are considered to be treacherous and

[91]E. W. Webster's translation.
[92]For modern lore of solar halos see Inwards, 63–64.
[93]See also Humphreys, 39–40; Longstreth, 140–143.
[94]"At each point of contact <of the arches of halos> occurs a parhelion which is a mock sun of brilliant colors called a sun-dog. Since the sun-dog is brighter than the other parts of the halo it sometimes appears when the rest of the halo cannot be seen" (Longstreth, 140–141).
[95]Th. 29. [96]880–889. See also Seneca, 1.13.1 and 3.

[97]Livy 28.11.3, 29.14.3; Julius Obsequens, Nos. 32 (92), 68 (128), 70 (130); Pliny 2.99; Gregory of Tours, Historia Francorum 4.30 (Migne, Patrologia Latina 71.294); Lydus, De Ostentis 4. See also A. S. Pease, M. Tulli Ciceronis De Divinatione, page 269 (University of Illinois Studies in Language and Literature, VI and VIII).
[98]Aristotle, Meteorologica 3.2, 372 a (E. W. Webster's translation).
[99]See too Stobaeus, Eclogae (Wachsmuth-Hense edition), 1, page 241.
[100]Bergen, 110. See also Inwards, 63.
[101]Longstreth says (141): "Sun-dogs hunt in pairs or fours".
[102]Th. 33. See also Pliny 2.129. [103]Th. 11.
[104]Compare Aratus 828 and Pliny 18.342 for the hollow disk. Plutarch, Quaestiones De Arati Signis 2 (Teubner edition, 7, pages 102–104), attributes the appearance of the hollow sun to clouds and the density of the air. See also a passage in Lucan 5.544–545:

(Sol) Orbe quoque exhaustus medio languensque recessit
spectantis oculos infirmo lumine passus.

[105]Th. 26. [106]Th. 31. [107]Theophrastus, De Ventis 3.15–16.
[108]Meteorologica 2.5, 361 b.

stormy, adds that a state of change is always indefinite and therefore liable to disturbance. The truth supposed to lie in this generalization forms the basis of astrological weather lore. We are told that it often happens that the planets as they enter or leave the signs of the zodiac cause a cessation of clear weather[109]. Good examples are to be found in Aratus:

Then the fields are seen bereft of corn-ears, when first the Sun comes together with the Lion. Then the roaring Etesian winds fall swooping on the vasty deep, and voyaging is no longer seasonable for oars. Then let broad-beamed ships be my choice, and let steersmen hold the helm into the wind[110].

Grievous then is the crashing swoop of the South winds when the sun joins Aegoceros, and then is the frost from heaven hard on the benumbed sailor[111].

Lydus says that when the sun is in Pisces the downfall of rain will be not less than a deluge[112]. He tells us likewise that, if in the month of April when the sun is entering Aries it should happen to thunder without rain ensuing, there will be, among other calamities, suffocating heat and drought and unproductive crops[113]. If thunder should happen to occur when the sun is entering Aegoceros in January, there will be a thick and smoky fog, so that fruit will decay and the wine will be of inferior quality[114].

Various kinds of weather are caused likewise if there is an earthquake when the sun is in certain 'houses'[115].

Since so much interest was manifested in weather signs, Vergil was sure of interested readers for his poetic elaboration of presages derived from the sun:

Also the sun both with his rising beams
And when in western wave his front he hides,
Gives many a token. Signs infallible
Attend the sun. He shows them in the skies
At morn and when the rising stars appear[116].
When his dim dawn a spotted mantle wears
And he, cloud-wrapt, the half his orb withdraws,
Then look for showers[117]: for then the southern storm,
Of forest, flock, and field the wrathful foe,
Is speeding from the deep. Or when at dawn
Sparse beams pierce heavy clouds, and pale of brow
Aurora from Tithonus' saffron bed
Shall take her flight[118],—ah, then the tendrilled vine
For mellowing grapes will sorry shelter prove,
While rattling thick upon the roof down pours
The dancing hail. But also when the sun
Is setting and his heavenly course is spanned,
Then more than ever mark his aspect well.
For oft we see strange shifts of color stray
Along his face: the azure heralds rain,
Flame-hued, strong wind. But if red flashes glow
With mingling spots, then you will soon behold
A heaven-wide tumult of dark clouds and storms.
On such a night let none my ship compel
On the deep seas to ride, nor from safe shore
Her cable sever. But if his orb shall shine
Undimmed, both when he gives the glorious day
Or his own gift beneath the world conceals,
Then vain your fear of storms, and you shall see
Your waving woods by cloudless north-winds move.
Lastly, what morn the closing eve portends,
What winds bring rainless clouds, what coming harm
The misty southwind means, of these and more
The sun will show the signs[119].

More or less extensive modern collections of solar weather signs may be found in Dunwoody, 76–79; Garriott, 25–27; Inwards, 55–64; Thomas, Nos. 2456, 2457, 2463, 2464, 2469, 2471, 2473, 2479–2486; and Swainson, 175–182. Bacon, Historia Ventorum, repeats many Greek maxims about the sun.

It is obvious, of course, that not a great deal of the popular weather lore of the sun is dependable. The scientific basis of those adages that are trustworthy is given by William J. Humphreys in his delightful little book, Weather Proverbs and Paradoxes (see especially pages 11–32). Another interesting discussion of signs in general is that by Professor Robert DeC. Ward, Weather Proverbs, Good and Bad, which appeared in the Harvard Alumni Bulletin, 27.613–621. The more reliable weather signs of the sun are collected in Edward Vernon's Is It Going to Rain?[120]

Professor Garriott thus concludes his discussion (published in 1903) of attempts to connect the weather upon earth with sun spots (33–34):

It appears, in fact, that while a consensus of opinion of those who have contributed to sun-spot literature is, that solar disturbances, as indicated by sun spots, affect the earth's magnetic and electrical conditions, a definite relation between sun spots and meteorological conditions has not been established. It is, however, possible and even probable, that longer periods of observation will permit comparisons that may define concurrent cycles in sun spots and weather. The idea that the sun controls not only the character of the weather experienced in the several seasons, but also the ordinary and extraordinary weather changes to which we are subjected from day to day, is a popular one, and discoveries in this direction will be welcomed by the meteorologist and the layman.

A more recent writer[121], however, concludes that so far as evidence is yet at hand, it suggests that the degree of storminess upon the earth varies in fairly close harmony with disturbances of the sun's atmosphere as indicated by sunspots.

In The London Illustrated News[122] for November 27, 1926, there is a page of illustrations of sun spots under the caption: The Cause of Recent Hurricanes? Sun-Spots Coincident with Them. It shows pictures of sun spots on the day of the Florida hurricane, September 17, 1926, as well as on the days preceding and following.

I am assured by an astronomer, however, that "there is no known connection between any given sun spot and any given storm on the earth's surface".

Efforts are now being made to show that there is a close connection between the sun and our weather. I find the following popular summary[123] of the work of an American meteorologist along this line:

Mr. H. H. Clayton. . . has proved that very distinct changes of barometer, temperature, and rainfall are

[109]Vegetius 4.40.
[110]Aratus 150–155. [111]Aratus 291–294. [112]De Ostentis 58.
[113]De Ostentis 24.
[114]De Ostentis 23. For somewhat similar data see Columella 11.2.49, 52, 58, 94.
[115]Lydus, De Ostentis 56, 57, 58.
[116]See also Aratus 819–821. [117]Isidorus, De Natura Rerum 38.4, refers to Vergil.
[118]Compare Aratus 845–846.

[119]Georgics 1.438–463 (T. C. Williams' translation: Harvard University Press, 1915). For other groups of signs derived from the sun see Aratus 819–889; Pliny 18.342–346. The signs in Theophrastus, De Signis, are not grouped.
[120]Second edition, Edinburgh, Macniven and Wallace, no date.
[121]Ellsworth Huntington, Earth and Sun: An Hypothesis of Weather and Sunspots, 35 (Yale University Press, New Haven, 1923).
[122]169.1037.
[123]Pages 111–112 of an article by C. G. Abbot, Measuring the Sun's Heat and Forecasting the Weather, The National Geographic Magazine, 49. 111–126.

caused by these changes of the intensity of sun rays. He even goes so far as to say. . . that all that we call weather—symbol for all that is variable, in distinction to climate, which is the steady, average condition of things—is really due to the sun's variation[124].

The following titles of papers give an indication of the trend of contemporary investigation of the effects of the sun upon the weather: Solar Variation and Forecasting[125]; Solar Radiation and Weather, or Forecasting Weather from Observations of the Sun[126].

(To be concluded)

UNIVERSITY OF MICHIGAN EUGENE S. MCCARTNEY

REVIEWS

The Healing Gods of Ancient Civilization. By Walter Addison Jayne, M.D. New Haven: Yale University Press (1925). Pp. XXXIX + 569. $5.

The publication of Dr. Jayne's work, The Healing Gods of Ancient Civilization, was made possible by the Philip Hamilton McMillan Memorial Publication Fund. To its generosity, no doubt, we owe the almost sumptuous appearance of the large, open print, and the seven beautiful plates of illustrations, all of which, with the exception of the "Abaton of Kos" (399), are from authentic monuments. In place of the latter plate, which appears to the reviewer both fanciful and theatrical, one would have preferred to see a reconstruction of the Epidaurian sanctuary.

The scope of the book is best understood from a conspectus of its contents: Introduction (XXV–XXXV); I. Egyptian Gods (3–86); II. Babylonia and Assyria (89–128); III. Pagan Semites of the West (131–142); IV. Indian Gods (145–178); V. Iranian Gods (181–197); VI. Grecian Gods (201–369); VII. Roman Gods (373–499); VIII. The Ancient Celts (503–521); Bibliography (523–542); Index (543–569).

The author excuses himself (XII) for having excluded the Post-Vedic religion, Buddhism, the Slavs and Teutons, as well as Ancient America, because "they would well repay a more detailed study than has yet been given them". He has also excluded the ancient Hebrews, presumably because he does not consider it his province to penetrate beyond the monotheism of the Bible, although Wellhausen and other scholars have done much to lift the veil covering the pre-revelation stage of the southern Semites.

The reason given by Dr. Jayne for these omissions leads us at once to note the chief characteristic of the book. Of course nobody will expect a physician, or for that matter, any scholar, to possess the equipment needed to encompass the enormous field of knowledge covered in this book. Dr. Jayne's work, however, is based entirely on secondary information and is, in fact, only a very industrious compilation of such information as was available to the author. The bibliography, indeed, shows very wide reading, not only in English, but also in French and German; in the latter the author had apparently to rely on the assistance of Mrs. Martin L. Cook. He has also taken the precaution to submit parts of the manuscripts to such authorities as the late Morris Jastrow, Jr., and Professors Henry F. Lutz and T. George Allen, and he has had the advice and assistance of others. But the fact remains that the author is himself not an investigator, but a physician interested in the religious roots of his science and that he is satisfied, in general, with presenting the material without any criticism.

Because the book is evidently addressed to a wide circle of readers, each chapter is divided into two parts, the first of which has little connection with the real topic of the author. It contains a general survey of the religion of the people under discussion. Thus the chapter on Egypt contains paragraphs on the pyramid texts, local deities, the Book of the Dead, festivals, as well as a survey of the medical libraries and of the medical papyri and their methods. The first parts of the chapters on Greece and Rome, too, deal, among other topics, with the origin of the gods, absence of dogma and moral restraint in religion, chthonic deities, animal incarnations, foreign influences in Roman religion, augury, haruspices, Orientalism, and the downfall of paganism. In each instance only the latter part of this first division treats of the views of illness and medicine as far as religious belief and practice enter into them. These 'introductory divisions', as we may call them, are naturally the least satisfactory. Lack of space permitted only the most condensed treatment, and little is found in them that is not in Hastings' Encyclopaedia of Religion and Ethics, to which the writer appears most deeply indebted, and in the generally accessible handbooks on the religions of the different nations discussed. There are, of course, statements with which the specialist will take issue. Thus, we read in the Preface (X) that the Mediterranean civilizations had their development in an Oriental nursery, but that "finally they overflowed westward. The learning came to Greece". This may be said to be based on the view formulated by Otto Gruppe in his Griechische Mythologie und Religionsgeschichte (in Iwan Mueller's Handbuch der Altertumswissenschaft). But that view never found many adherents. It is scarcely maintainable, even if one does not go the whole way with Carl Schuchhardt's Alt-Europa (1919), which derives the Mediterranean civilization from two or three separate migrations from Spain and from the Rhine valley. Granting all possible strength to the Oriental influence on the Minoan-Mycenaean civilization, it still remains true that there is a large original and native stratum which is independent of the East. A lack of philological and historical training is also evident in the statement (31) that King Athotis, of the first dynasty of the Thinite period, wrote anatomical works, for this bit of information is quoted from the works of Sextus Iulius Africanus, who ascribes it to Manetho. Africanus, however, a writer of the third century of our era, was a critic of biblical tradition, but one of the

[124]See also chapter 10 (215–269), The Sun and the Weather, in World Weather (The Macmillan Co., 1923), by H. H. Clayton.

[125]By C. G. Abbot, Smithsonian Miscellaneous Collections, Vol. 77, No. 5.

[126]H. H. Clayton, Vol. 77, No. 6.

most credulous of men, as is proved by the wonderful things which his writings contributed to the farrago of the Geoponica. We read also (202) that some Greek gods arose from the myths which had grown up around the "Agathos Daimon", ancestor of the family, who had acquired a superhuman status. Now, in the first place, it is very improbable that any gods were *created* by myths, i.e. stories told about gods, and, secondly, the Agathos Daimon is certainly not an apotheosized ancestor.

In general, it would have been better had the author omitted these parts entirely, since they contain nothing new to the scholar, and may, often indeed do, mislead the layman. The net result of all these discussions might well have been summed up in a few introductory pages, for it amounts to this—it is not new, but has long been a commonplace of religion—that, from early times to late, diseases were viewed as divine afflictions, sent either by the offended deity or by a malevolent spirit, and that the remedies applied were, for this reason, largely magical-theurgical.

The great value of the book—and it has great value—lies in the second part of each chapter. Here the author first catalogues all the gods of a given religion who had to do with illnesses and their cure, and then compiles for each of them what we know about them, both from literature and from art. Thus we have here a very convenient compendium of all 'medical' gods, a compendium which will certainly prove very useful to every one who wants this information. If there is any fault to be found here, it lies in the fact that Dr. Jayne has been extremely liberal in his inclusion of names and then is compelled to acknowledge that such and such a god has really very little to do with healing, or that we know nothing at all about such connection: instances are The Muses (309), Helena (362), Anna Perenna (417), Mars (432), and Proserpina (469). We leave this part of the work with the impression that there is lacking a desirable feature, namely a summarizing chapter, setting forth clearly once more, what has become our conviction as we peruse these pages, that every god quite naturally may be invoked to heal disease and that there were but a very few figures whose special function was medical.

The book is valuable, in spite of its shortcomings, and the author certainly ought to be congratulated and thanked by philologians for having brought his medical knowledge to bear, to shed light, for example, upon such cults as that of the Epidaurian Asklepios.

HUNTER COLLEGE ERNST RIESS

The Roman Forum, The Greatest Small Spot on Earth. By Ralph Van Deman Magoffin. Bulletin VII, The Service Bureau for Classical Teachers of The American Classical League (1927). Pp. 38. 25 cents, plus postage.

Professor Magoffin's brochure, The Roman Forum, The Greatest Small Spot on Earth, has two virtues. In a small space it furnishes a great amount of information relating to the history of the Forum, in a form sufficiently untechnical for use in Secondary Schools. In addition, it has fifty illustrations of the Forum and monuments in the Forum, which are of a sort not usually found in works as popular as this.

The brochure, however, shows evidence of very hasty composition. The reviewer has noticed a number of instances in which there are minor errors of fact, and several cases of unfortunate diction. Of the former type of infelicity, the following will serve as an example. On page 15 one finds "Mettus Curtius" (obviously a misprint for 'Mettius Curtius'). On the same page we read that "...Marcus Curtius had leaped with his horse into an abyss that opened up in the middle of the Forum, in order to save his city by fulfilling a vow..." Livy states (7.6) that it was an oracle, not a vow, that Marcus satisfied by his sacrifice. There is an error in the description under the picture on page 29, in which the Arch of Constantine and the Colosseum are said to be "really some 200 yards away beyond the slope on which the Arch of Titus stands". Using Kiepert-Hülsen's Formae Urbis Romae Antiquae I find that the distance is about 500 yards.

I need not comment on the following quotation from page 17. "Near the Pool of Juturna there was a place where from very ancient times the goddess Vesta had been worshipped. She was one of the earliest Roman deities and one in whom they <*sic!*> put great trust..." The bed-time story flavor of the following (35) will be resented by the mind of the High School student who uses the brochure: "...When the picture was made from his negative, there, *as clear as you please*[1], were some letters which gave the name of Lucius Naevius Surdinus the praetor..." Illuminating, too, is the following (7): "...Each Roman seized upon the fair Sabiness of his choice..."

At times Professor Magoffin is not entirely clear in his statements. That "The daughters of the Sabines on the Quirinal used to drive the cows and sheep and hogs down to the lake to drink..." (4) is true enough, but the reader has not yet been told that the Quirinal settlement was made by Sabines. For another confusing passage see the description of the Fasti Capitolini and their discovery in 1546 (17). Nor is the reader any less puzzled by the description of the funeral of the Emperor Pertinax (33). From the statements made here one is in doubt as to where the Emperor's body is.

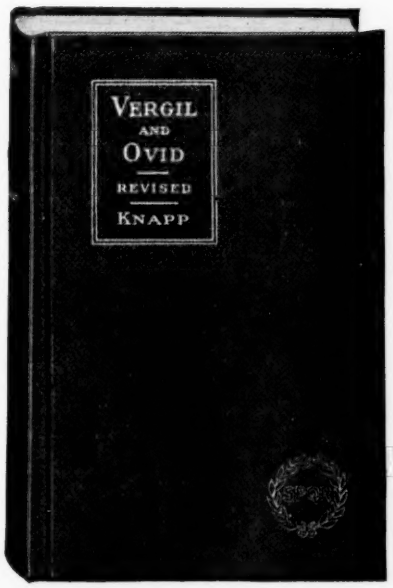
The arrangement of the illustrations seems to have been made without any particular scheme in mind. The illustrations themselves are well worth the price of the pamphlet.

Omitting from consideration the haste and the superficiality of the work, we may say that it is doubtful whether many such pamphlets could convey to the mind of the Secondary School student as accurate and complete an idea of this small spot which is so very important to the study of Cicero and Caesar.

LAFAYETTE COLLEGE GEORGE MCCRACKEN

[1]The Italics are mine.

Look forward now to the Bi-millennial (2000th) Anniversary of Vergil's birth to be celebrated in 1930. This new "anniversary edition" is an indication of the increasing interest in the life and work of the great poet.



KNAPP'S VERGIL REVISED

Just Published

(September, 1928)

The Standard Edition

For twenty-eight years Knapp's Vergil has been accepted by the Latin teachers of the country as the standard classroom edition of the Aeneid. Now, in the light of his many additional years of study and experience, and of the wide use of the book in thousands of Schools, Professor Knapp has made this revision.

New Plates

The book has been entirely reset, and printed from new plates.

New Sections in the Introduction

Added introductory material stresses more fully the literary character of the work. Illustrations from English poetry are used.

Twelve-book Edition
Books I-VI complete, and extensive selections from Books VII-XII. 848 pages, $1.96.

Six-book Edition, with Ovid.
Twelve selections from the Metamorphoses. 848 pages, $1.96.

Text editions for class use supplied free.

New Illustrations

There are many more illustrations than in the old edition—all of them from ancient, authentic sources.

SCOTT, FORESMAN AND COMPANY

CHICAGO ATLANTA DALLAS NEW YORK

OCT 30 1928

For the Well-Organized First Year Latin Course

LATIN—FIRST YEAR

The Climax Series

By MAGOFFIN and HENRY

A book which carries out not only the spirit of the Classical Investigation, but also the specific recommendations in the provision of functional vocabulary, inflection and syntax, connected reading in Latin narrative based on Roman history and mythology, and material illustrating the importance of the classical heritage in our every day life.

CLASSICAL MYTHS THAT LIVE TODAY

By FRANCIS E. SABIN

A stimulating and attractive reader for High School or Junior High School, retelling famous Greek and Roman myths from the modern educational viewpoint.

NĀRRĀTIŌNĒS BIBLICAE

By LIPSKY and WEDECK

Seven familiar stories from the Vulgate Bible. The easy Latin of the Vulgate has been adapted for use as supplementary connected reading for the second half of the first year.

SILVER, BURDETT AND COMPANY

NEW YORK NEWARK BOSTON CHICAGO SAN FRANCISCO

NEW HEATH LATIN SERIES

W. L. CARR, GENERAL EDITOR

PARSONS AND LITTLE

FIRST LATIN LESSONS

SECOND LATIN LESSONS

The new stimulants for learning to read and to understand Latin

D. C. HEATH AND COMPANY

AMERICAN CLASSICAL LEAGUE

—Promotes the welfare of Classical teachers with College and School authorities.

—Arouses interest in the Classics in the public at large.

—Maintains the Service Bureau for Classical Teachers.

—Cooperates with all other classical agencies and supplements their work.

Membership in this League is in no sense a substitute for membership in any other Classical Organization. Every teacher of Classics should be a member of the American Classical League. For membership, including subscription to *Latin Notes* published by the League, through the Service Bureau, please send one dollar to Rollin H. Tanner, Secretary, New York University, University Heights, Bronx, New York.